# STATE OF UTAH DIVISION OF WATER QUALITY DEPARTMENT OF ENVIRONMENTAL QUALITY SALT LAKE CITY, UTAH

#### §401 Water Quality Certification No. DWQ-2018-00109

Pursuant to §401 of the Federal Clean Water Act(CWA), the Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ) certifies that the applicant has provided reasonable assurance that any discharges associated with the proposed project will not violate surface water quality standards, or cause additional degradation in surface water not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ herby issues this §401 Water Quality Certification provided any listed conditions are met and included in the corresponding U.S. Army Corps of Engineers (USACE) 404 Permit.

Applicant:	Lehi City
	Brad Kenison
	153 North 100 East
	Lehi City, UT 84043

of drainage channel.

Project: The applicant is proposing to widen a 1.57-mile section of Main Street/Crossroads Boulevard from 3 lanes to 5 lanes. The proposed 74-foot paved roadway width would include two 12-foot travel lanes in each direction, a 12-foot center turn lane, 5-foot bike lanes in each direction, and 2-foot buffers between car and bike lanes. In addition to the paved width, the project would include a 2-foot curb and gutter, 7-foot planters, and 5-foot sidewalks on each side of the roadway, for a total proposed width of 102 feet. The proposed roadway improvements would also include reconstruction of the bridge over the Jordan River and the redesign of 3 intersections. The overall project purpose is to improve regional mobility. The applicant believes there is a need to provide infrastructure to meet the growing population of Saratoga Springs and Lehi City. The project would result in permanent impacts to approximately 0.88 acre of emergent marsh wetlands, 0.27 acre of scrub-shrub wetlands and 2,289 linear feet

From the intersection of Commerce Drive and Crossroads Blvd. in Saratoga Springs, UT to the intersection of W. Main Street and 1300 W in Lehi, UT. Start: 40.387491, -111.912792 End: 40.387377, -111.886608

Jordan River, 0.88 acre of emergent marsh wetlands, 0.27 acre of scrub-shrub wetlands, and 2,289 linear feet of drainage channel.

Effective Date:

August X, 2019

Erica Brown Gaddis, PhD
Director, Division Water Quality

**Location:** 

Watercourse(s):

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## I. Background

## A. Other Applicable Permits

1. USACE 404 Permit: SPK-2018-00109

2. Utah DNR Stream Alteration Order No.: 18-54-05SA

#### B. Project Description/Purpose

The applicant is proposing to widen a 1.57-mile section of Main Street/Crossroads Boulevard from 3 lanes to 5 lanes. The proposed 74-foot paved roadway width would include two 12-foot travel lanes in each direction, a 12-foot center turn lane, 5-foot bike lanes in each direction, and 2-foot buffers between car and bike lanes. In addition to the paved width, the project would include a 2-foot curb and gutter, 7-foot planters, and 5-foot sidewalks on each side of the roadway, for a total proposed width of 102 feet. The proposed roadway improvements would also include reconstruction of the bridge over the Jordan River and the redesign of 3 intersections. The overall project purpose is to improve regional mobility. The applicant believes there is a need to provide infrastructure to meet the growing population of Saratoga Springs and Lehi City. The project would result in permanent impacts to approximately 0.88 acre of emergent marsh wetlands, 0.27 acre of scrub-shrub wetlands and 2,289 linear feet of drainage channel.

## C. Site Description

The approximately 30.64-acre project site is located in Lehi, Utah County. There are approximately 14.22 acres of emergent wetlands, 1.35 acres of scrub-shrub wetlands, 0.32 acre of wet meadow wetlands, 0.4 acre of open water, and 5,535 linear feet of drainage channel within the project area. The site is located in a developing rural area between Saratoga Springs and Lehi City and is bordered by new residential developments and some remaining open spaces. The site is generally flat and slightly sloped toward the Jordan River. Wetland areas are dominated by common reed, cattail, teasel, bulrush, reed canary grass, arctic rush, salt cedar, Russian olive, and willow, while upland areas are dominated by wheatgrass, meadow fescue, thistle, and cheatgrass. The Jordan River flows northward under an existing bridge and a portion of the project area adjacent to the crossing is within the 100-year floodplain of the Jordan River. Hydrology within the study area is influenced primarily by groundwater levels and surface runoff, though human disturbance has substantially altered regional hydrology since settlement.

#### **II.** Certification Conditions

## A. Project Specific Conditions

#### 1. Wetland Alterations

- a. Wetlands outside of the permitted impact area shall be clearly marked to prevent unintentional/additional impacts to water features.
- b. Wetlands that are not proposed to be altered onsite should be protected from discharges by silt fence or equivalent BMP.

## 2. Best Management Practices (BMPs)

a. The large outfall planned for the northwest portion of the bridge over the Jordan River will be required to have stormwater treatment in place. The treatment should focus on the removal of Total Dissolved Solids (TDS) as well as, other common roadway pollutants (e.g. heavy metals, nutrient, and organics). Once detailed plans are available, please provide it to the DWQ for their records.

## 3. Mitigation

a. Once a final mitigation plan has been accepted the USCAE, a copy should be sent to Utah DWQ for our records. Additionally, all monitoring reports associated with mitigation required by the USACE, shall additionally be submitted to the DWQ for review.

## B. General Conditions

## 1. Good Housekeeping

- a. Applicant and their subcontractors shall ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the construction period.
- b. Retain a copy of this §401 Certification and its affiliated USACE 404 Permit onsite.

#### 2. Stormwater and BMPs

a. Water quality standards in associated water resources could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the

erosion-sediment and nutrient load to any adjacent waters during project construction. The applicant shall not use any fill material which may leach organic chemicals (e.g. discarded asphalt), noxious weeds/seeds or nutrients (e.g., phosphate rock) into waters of the State.

- b. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Stormwater General Permit for Construction Activities, Permit No. UTR300000[<sup>1</sup>]. The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not limited to, final site maps and legible plans, location of stormwater outfalls/discharges, as well as information pertaining to any stormwater retention requirements.
- c. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering, Permit No. UTG070000[<sup>2</sup>]. The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations, unless water is contained onsite.
- d. A project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.
- e. Utah Administrative Code R317-2 requires that the Applicant cannot increase water turbidity by 10 NTUs. If violated shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality's (DEQ) recommended environmental BMPs for construction sites are located on our web site [<sup>3</sup>].

<sup>&</sup>lt;sup>1</sup>Link: https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2017-003485.pdf

<sup>&</sup>lt;sup>2</sup> Link: https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/utg070000.pdf

<sup>&</sup>lt;sup>3</sup>Link: https://deq.utah.gov/legacy/businesses/business-assistance/construction/index.htm

## 3. Spills

- a. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest waterbody (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.
- b. Utah Annotated Code 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to waters of the State, including wetlands, must be immediately reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number.

## **III.** Aquatic Resource Impacts

All Waters of the State of Utah (defined in Administrative Code (UAC) R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (see UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects of aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated (beneficial) uses of that water body. Listed below are the water features within the project area and their associated designated beneficial uses (see UAC R317-2-6):

## A. <u>Linear Water Features</u>

- 1. Jordan River (Narrows to Utah Lake)
  - a. Class 1C: Protected for use as a raw water source for domestic water systems.
  - b. <u>Class 2B</u>: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
  - c. <u>Class 3B:</u> Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
  - d. <u>Class 4:</u> Protected for agricultural uses including irrigation of crops and stock watering.
- 2. Unnamed Drainage Channel
  - a. Class 2B: as described above;
  - b. Class 3E: Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

## B. Wetlands (emergent marsh wetlands & scrub-shrub wetlands)

- a. Class 2B: as described above;
- b. Class 3D: Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Classifications are based on R317-2-13.13, where it states that "all waters not specifically classified are presumptively classified: 2B, 3D."

## C. <u>Impairments and Pollutants of Concern:</u>

Results from the current water quality assessment, as documented in Utah's 2016 Integrated Report [4], indicate that the water quality of the Jordan River is considered to be impaired (Assessment Category 5). These impairments include degraded drinking water source (Class 1C), due to excessive concentrations of arsenic; and degraded agricultural uses (Classes 4), due to excessive concentrations of Total Dissolved Solids (TDS). The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as a total maximum daily load (TMDL) study. A TMDL is required for each parameter and water body to define pollutant reduction requirements necessary for the water body to meet water quality standards. At present, no TMDLs have been finalized as it relates to arsenic and TDS for the Jordan River.

<sup>&</sup>lt;sup>4</sup>Link: https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf

## IV. Modifications

- A. Without limiting DWQ's discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:
  - 1. Adverse or potential adverse project effects on water quality of designated beneficial uses that did not exist or were not reasonably apparent when this certification was issued;
  - 2. TMDLs;
  - 3. Changes in Water quality standards;
  - 4. Any failure of Certification conditions to protect water quality or designated uses when the Certification was issued; or
  - 5. Any change in the Project or its operations that will adversely affect water quality of designated beneficial uses when this Certification was issued.

## V. Other Information

#### A. Fees

1. The legislatively-mandated fee for the 2019 fiscal year is \$100.00/hour, for review and issuance of the §401 Water Quality Certification [<sup>4</sup>]. A quarterly invoice will be sent once plans have been approved. Your payment is due within 30 days.

#### B. Liabilities

- 1. Applicant must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the project. This §401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.
- 2. This §401 Certification does not preclude the applicant's responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the applicant from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

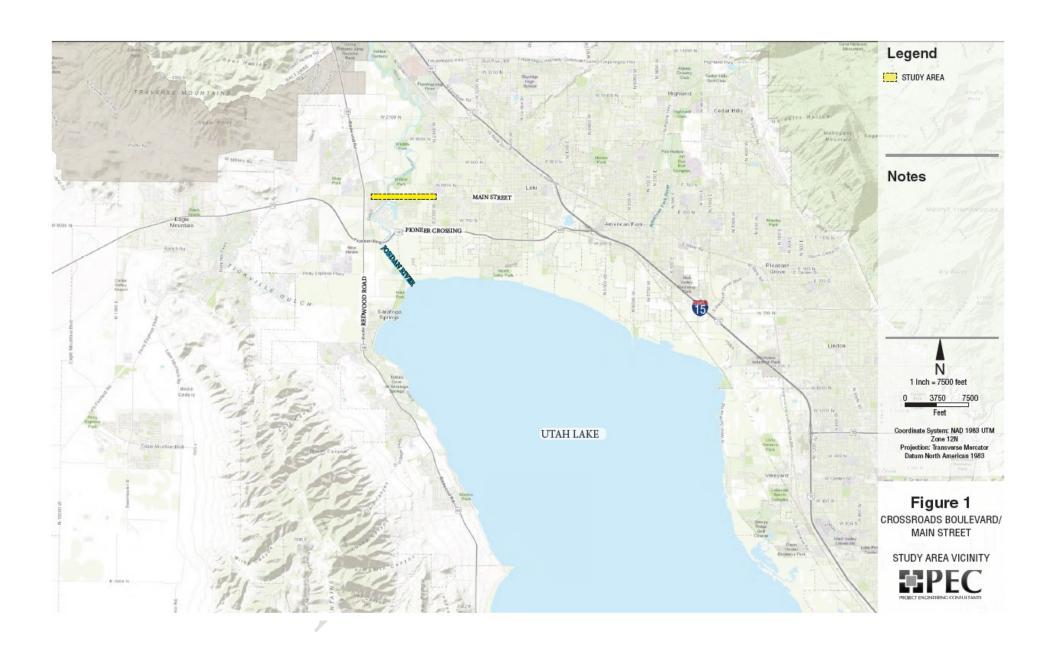
<sup>&</sup>lt;sup>5</sup>Link: https://documents.deq.utah.gov/admin/2019-fee-schedule.pdf

# VI. Public Notice and Comments

- A. Public Notice Dates
  - 1. USACE Permit No. SPK-2018-00109: 11/30/18 12/31/18
  - 2. Utah DEQ Certification No. DWQ-2018-00109 :
- B. Public Notice Comments/Response

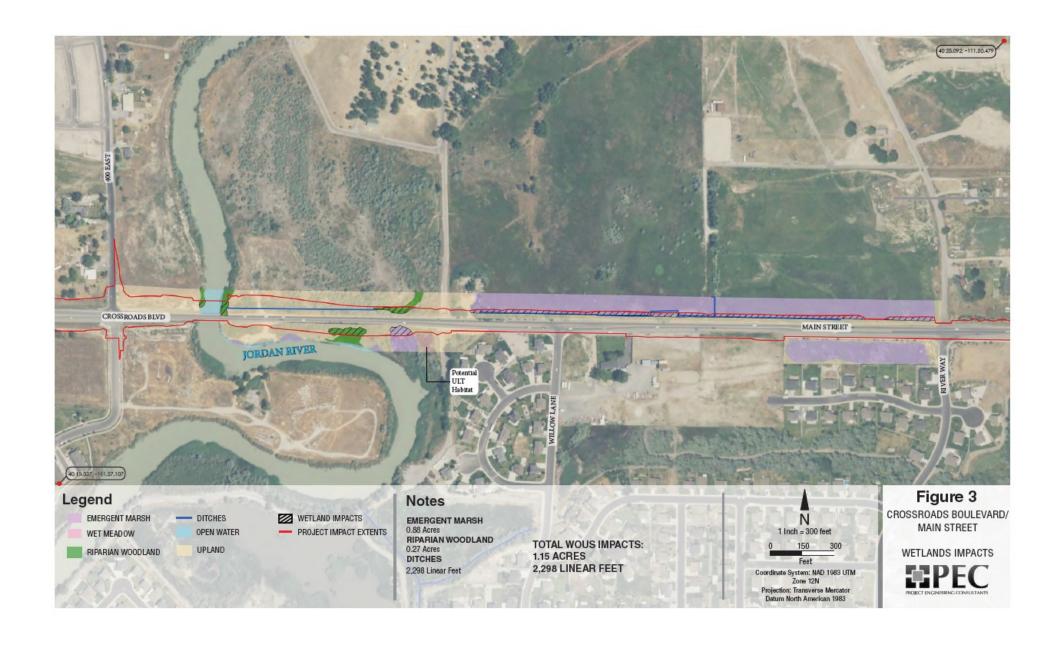
**Appendix A: Site Location** 





Appendix B: Project Layout and Impacts to Waters of the State





**Appendix C: Proposed Project Outfalls** 





Appendix D: Proposed Mitigation Site Plan



